WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, March 15, 2004

Updated Search 3/04 10P

Hide?	Set Name	Query	Hit Count
		DB=PGPB; PLUR=YES; OP=AND	
☐	L1	981310	2
☐	L2	08/981310	0
		DB=USOC; PLUR=YES; OP=AND	
☐	L3	08/981310	0
☐	L4	981310	1
		DB=PGPB,USPT; PLUR=YES; OP=AND	
☐	L5	981310	4
☐	L6	landegren.in.	22
☐	L7	catt.in.	70
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=AND	
☐	L8	catt.in.	199
☐	L9	L8 and (apparat$ or devic$)	78
☐	L10	L9 and zon$	13
☐	L11	zone$.clm. and (devic$ or apparat$).clm.	39229
☐	L12	L11 and (read$ or measur$).clm. and (initiat$ or actuat$).clm.	1196
☐	L13	L12 and (detect$ or immobil$ or complex$ or stop$).clm.	661
☐	L14	L13 and (analyt$ or ligand$ or receptor$ or target$ or antibod$ or antigen$).clm.	114
☐	L15	L14 and (paper or nitrocellulose or nitor-cellulose or cellulose or strip or carrier).clm.	55
☐	L16	L14 and (paper or nitrocellulose or nitro-cellulose or cellulose or strip or carrier).clm.	55
☐	L17	L16 and fit.clm.	15
☐	L18	L16 and insert$.clm.	4
☐	L19	L16 and (key or $lock or lock$).clm.	46

END OF SEARCH HISTORY

First Hit

Generate Collection Print

L18: Entry 2 of 4 File: PGPB Mar 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030044317
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030044317 A1

TITLE: READING DEVICES AND ASSAY DEVICES FOR USE THEREWITH

PUBLICATION-DATE: March 6, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
CATT, MICHAEL	NORTHAMPTON		GB	
MUNDILL, PAUL H.	NORTHAMPTON		GB	
PRIOR, MICHAEL E.	NORTHAMPTON		GB	

APPL-NO: 08/ 338141 [PALM]
DATE FILED: November 9, 1994

CONTINUED PROSECUTION APPLICATION: This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
EP	93309053.2	1993EP-93309053.2	November 12, 1993

INT-CL: [07] G01 N 31/22, G01 N 21/00

US-CL-PUBLISHED: 422/58; 422/68.1, 422/82.05
US-CL-CURRENT: 422/58; 422/68.1, 422/82.05

REPRESENTATIVE-FIGURES: 2

ABSTRACT:

A method of "reading" the result of an assay effected by concentrating a detectable material in a comparatively small zone of a carrier in the form of a strip, sheet or layer through the thickness of which electromagnetic radiation such as visible light is transmissible, wherein at least a portion of one face or the carrier is exposed to incident electromagnetic radiation which is substantially uniform across the entire portion, the portion including the small zone, and electromagnetic radiation emerging from the opposite face of the carrier is measured to determine the assay result. Preferably the radiation is diffuse light.

First Hit

Generate Collection Print

L18: Entry 2 of 4 File: PGPB Mar 6, 2003

DOCUMENT-IDENTIFIER: US 20030044317 A1
TITLE: READING DEVICES AND ASSAY DEVICES FOR USE THEREWITH

CLAIMS:

1. An assay result measuring device for reading the result of an assay effected by concentrating a detectable material in a small zone of a porous sheet or strip, which device comprises: a) a source of diffuse light having a wavelength that is strongly absorbed by said detectable material; b) sensing means to sense incident light from said source; c) means for holding said porous sheet or strip with said small zone in a light path between said source and said sensor; and d) electronic mean connected to said sensing means, said electronic means being programmed to derive from sensed incident light a measure of the extent to which said detectable material has become concentrated in said small zone.

2. A device according to claim 1, wherein said diffuse light is pulse , and sa d electronic means is programmed to control said sensing means such that said sensing means only senses incident light phase with said pulsed light, said light preferably having a pulse frequency of at least about 1 kHz.

3. An assay result reader, for use in conjunction with an assay device comprising a porous liquid-permeable carrier strip or sheet through the thickness of which electromagnetic radiation is transmissible, said carrier including a detection zone in which an assay result is revealed by specific binding of a detectable material directly or indirectly to a binding agent immobilised in said detection zone, detection of said material being effected as a response to said electromagnetic radiation, said assay result reader comprising: a) receiving means for receiving at least a portion of said assay device, said portion including said detection zone; b) b) reading means associated with said receiving means, said reading means comprising: i) at least one source of diffuse electromagnetic radiation; and ii) one or more sensors capable of detecting the intensity of said electromagnetic radiation; said source and said sensor(s) being positioned such that when said portion of said assay device is received within said receiving means, said detection zone is disposed in the path between said source and said sensor(s).

4. An assay result reader according to claim 3, having a diffuser in from of id one or more sensors such that electromagnetic radiation from said diffuse source must pass through said diffuser before reaching said one or more sensors, and a d detection zone of said assay device being disposed in path between said diffuse source and said diffuser.

5. An assay result reader according to claim 3 or claim 4, wherein said electromagnetic radiation is light.

6. An assay result reader according to claim 5, wherein said light is pulsed, preferably having a pulse frequency of at least about 1 kHz.

7. An assay device comprising a porous liquid-permeable carrier strip or sheet through the thickness of which electromagnetic radiation is transmissible

diffusely, said carrier being within a casing, said carried including at least one detection zone in which an assay result is revealed by specific binding of a detectable material directly or indirectly to a binding agent immobilised in said detection zone, detection of said material being effected as a response to said electromagnetic radiation, and said casing having electromagnetic radiation transmitting regions enabling electromagnetic radiation from an external source to be passed through said device, said detection zone lying in the electromagnetic radiation path between said electromagnetic energy transmitting regions.

8. An assay device according to claim 7, wherein said electromagnetic radiation comprises light, preferably visible light.

9. An assay device according to claim 7 or claim 8, wherein said detectable material material is a particulate direct label.

10. An assay device according to any one of claims 7 to 9, wherein said carrier strip or sheet comprises paper, nitrocellulose or the like, preferably having a thickness not exceeding 1 mm.

11. An assay device and assay result reader combination, wherein: a) said device comprises a porous liquid-permeable carrier strip or sheet through the thickness of which electromagnetic radiation is transmissible diffusely, said carrier preferably being within a casing or cover, said carrier including at least one detection zone in which an assay result is revealed by specific binding of a detectable material directly or indirectly to a binding agent immobilised in said detection zone; b) said casing or cover (if present) has electromagnetic energy transmitting regions enabling electromagnetic radiation from an external source to be passed through said device, said detection zone lying in the path between said transmitting regions; c) said assay result reader includes receiving means for receiving at least least a portion of said device, said portion including said at least one detection zone, to present said at least one detection zone to reading means, said reading means incorporating a source of uniform electromagnetic radiation and one or more sensors located such that upon insertion of said device into said receiving means, electromagnetic radiation can be passed through said device and the intensity of electromagnetic radiation emerging from said device can be detected by said sensor (s).

12. Combination as claimed in claim 11, wherein said receiving means incorporates interlocking means engagable with corresponding interlocking means on said device to ensure that upon receipt of said device by said reader said detection zone(s) is located and maintained in a predetermined spacial relationship relative to said reading means.

13. Combination as claimed in claim 11 or claim 12, wherein said receiving means includes actuating means triggered by said receipt of said device, said actuating means causing said reading of said detection zone(s) to be initiated.

14. Combination as claimed in any one of claim 11 to 13, wherein said device has a casing or cover which includes internal registration means which engages with corresponding registration means associated with said carrier such that said detection zone within said device casing or cover is located in a predetermined spacial relationship relative to said interlocking means on said device casing or cover.

15. Combination according to claim 14, wherein said internal registration means comprises a pin or the like, engagable with a hole or indentation in said carrier, said detection zone being at a predetermined location on said carrier relative to said hole or indentation.

19. Combination claimed n any one of claims 11 to 18, wherein said carrier strip or

sheet comprises paper, nitrocellulose or the like preferably having a thickness not exceeding 1 mm.

20. Combination as claimed in any one of claims 11 to 19, wherein said detectable material comprises a particulate direct label.

22. A test kit comprising an assay device and assay result reader combination according to any one of claims 11 to 21, the assay device being one of a plurality of identical such devices provided as part of the kit.

23. A method of determining the concentration of an analyte, in a sample liquid involving use of an assay device and assay result reader combination according to any one of claims 11 to 21.

24. A method of "reading" the result of an assay effected by concentrating a detectable material in a comparatively small zone of a carrier in the form of a strip, sheet or layer through the thickness of which electromagnetic radiation is transmissible, wherein at least a portion of one face of said carrier is exposed to incident electromagnetic radiation which is substantially uniform across the entire portion, said portion including said zone, and electromagnetic radiation emerging from the opposite face of said carrier is measured to determine said assay result.

25. A method according to claim 24, wherein said incident electromagnetic radiation is of substantially uniform intensity across said exposed portion of said carrier.

28. A method according to any one of the preceding claims, wherein said detectable material is a particulate direct label.

First Hit Fwd Refs

L10: Entry 3 of 13 File: USPT Sep 24, 2002

US-PAT-NO: 6454726
DOCUMENT-IDENTIFIER: US 6454726 B1

TITLE: Monitoring method

DATE-ISSUED: September 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Catt; Michael	Wellingborough			GB
Coley; John	Stanwick			GB
Davis; Paul J	Felmersham			GB

US-CL-CURRENT: 600/551

CLAIMS:

What is claimed is:

1. A method of predicting the fertile period during a current human ovulation cycle of an individual human female by detecting an elevated urinary E3G concentration in the pre-ovulation phase, wherein the elevated urinary E3G concentration is determined by reference to a threshold concentration determined for said individual human female from measurements of the E3G concentration in her urine during the pre-ovulation phase of at least one previous ovulation cycle wherein the urinary E3G threshold concentration adopted for the current cycle is the concentration that is, in a previous ovulation cycle, exceeded more frequently during the total number of days constituting the transition phase of that previous cycle than during the same number of days in the infertile phase immediately preceding said transition phase.

2. A method according to claim 1 wherein the urinary E3G threshold concentration is the concentration that is exceeded on not more than 30% of the days in the infertile phase but is exceeded on not fewer than 60% of the days in the transition phase.

3. A method according to claim 1 wherein the threshold concentration is the concentration that is exceeded on not more than 20% of the days in the infertile phase but is exceeded on not fewer than 80% of the days in the transition phase.

4. Electronic means for use in a method of monitoring the status of a current mammalian ovulation cycle, comprising means for processing analyte concentration test data obtained from testing a body fluid conducted during at least part of the pre-ovulation phase of the current cycle of an individual human female subject, and means to identify via said processing an analyte concentration change indicative of imminent ovulation, relative to an analyte concentration reference value that is adapted to said individual subject on the basis of analyte concentration test data obtained from the individual subject during one or more previous ovulation cycles wherein the urinary E3G threshold concentration adopted for the current cycle is the concentration that, in

a previous cycle, is exceeded on not more than 30% of the days in the infertile phase but is exceeded on not fewer than 60% of the days in the transition phase.

5. Electronic means according to claim 4, wherein the urinary E3G threshold concentration is the concentration that is exceeded on not more than 20% of the days in the infertile phase but is exceeded on not fewer than 80% of the days in the transition phase.